产品承认书
SPECIFICATION FOR APPROVAL

客户名称:
CUSTOMER

我司料号:
OUR PART NO. **XR1090-4R7M**

我司品名:
OUR PART NAME SMD POWER INDUCTOR

送样日期:
DATE SAMPLES

数 量:
QUANTITY

制造确认 MANUFACTURER APPROVE		
拟制 DRAWN	审核 CHECKED	确认 APPROVED
Hu Fangting	Rao Ping	Li Zhengxiong

客户确认 CUSTOMER APPROVE

客户名称 CUSTOMER NAME:

客户料号 CUSTOMER P/N:

规格型号 DESCRIPTION: XR1090 4.7uH ±20% 17A

检查結果: □ 合格 □不合格 签名及盖章:

INSPECT RESULT ACCEPT REJECT SIGNATURE AND STAMP

说明 REMARK:

如对本承认书内容有异议请提出或标记发送至我司，本承认书在未收到异议回复时于本承认书提供一周后生效。

If you have any objection to the contents of this acknowledgment, please raise it or send the mark to us. The a will become effective one week after the acknowledgment is provided in the absence of any objection.

东莞市祥如电子有限公司

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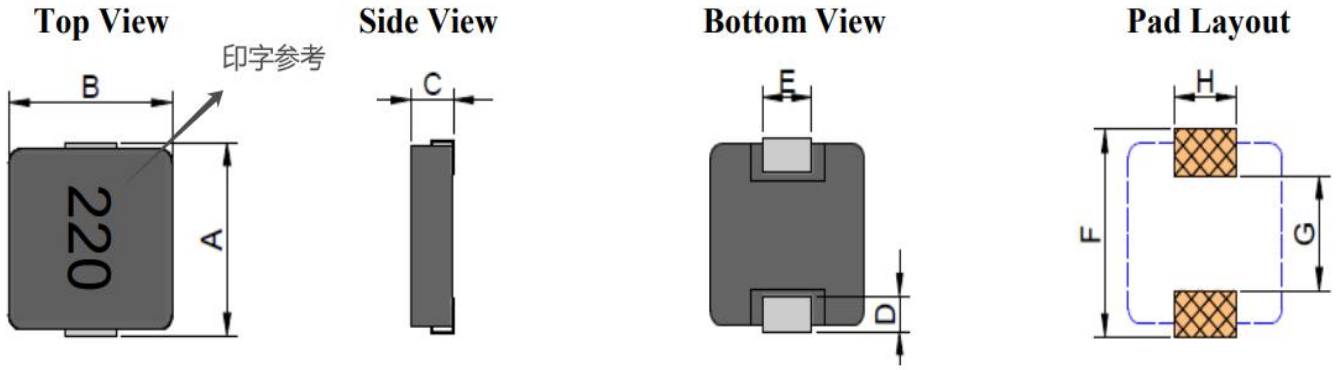
Applications：	**Features：**
* High density DC/DC converters	* RoHS compliant
* POL converters	* Low profile type
* High current VRM/VRD for notebook / Server / desktop CPUs	* Shielded construction
* High speed charger	* Ultra low buzz noise due to molding construction
* For thickness less than 1.2mm, suitable for low profile applications e.g., Ultra thin NB/Monitor/TV/Tablet	**Operating & Storage Condition :**
Standard Atmospheric Conditions :	* Operating Temp. : -55 to +125°C
* Ambient Temp : 20+/-15°C	* Storage Temp. : -25 to +35°C
* Relative Humidity : 65+/-20%	* Storage Life Time : 12 Months @25°C , RH 70%

Dimension & Recommended PAD Layout: [mm]：



A	B	C	D	E	F	G	H
9.8±0.3	8.8±0.3	8.5±0.2	2.3±0.5	5.0±0.3	10.2 ref	3.3ref	5.6 ref

Electrical Characteristics:

P/N	电感量 Inductance（uH）	Tolerance (±%)	DCR(mΩ)		额定电流 Irms.(A) typ.	饱和电流 Isat.(A) typ.
			typ.	max.		
XR1090-4R7M	4.7	20	9.2	11.0	13	17

* Test Condition @100KHz / 1.0Vrms, 25°C Ambient

* Irms DC current (A) that will cause an approximate ΔT of 40°C

* Isat DC current (A) that will cause L to drop approximately 30%

Test Equipment :

* Wayne kerr 3260B/G LCR Meter

* Wayne kerr 3265B Bias Current Source

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General:

◆Products should not be kept in unsuitable storage conditions, such as areas susceptible to high temperatures, high humidity, dust or corrosion.

◆Don't use products in a place where dew condenses. Since dew condensation caused by temperature change, please pay special attention when using products in a sealed condition.

◆Always handle products with care.

◆Don't touch electrodes directly with bare hands as oil secretions may inhibit soldering.

◆Always ensure optimum conditions for soldering.

◆Don't bend the terminals or subject them to excessive stress.

◆Please ensure that all terminals and case lugs are completely fixed with solder onto PCB.

◆Avoid placing chip inductors near the edge of the PCB.

◆Our SMD coils are designed for automatic mounting. Please be careful if soldering by hand.

◆Don't touch any exposed winding part and avoid coming into contact with the guide of electrode in automatic mounting.

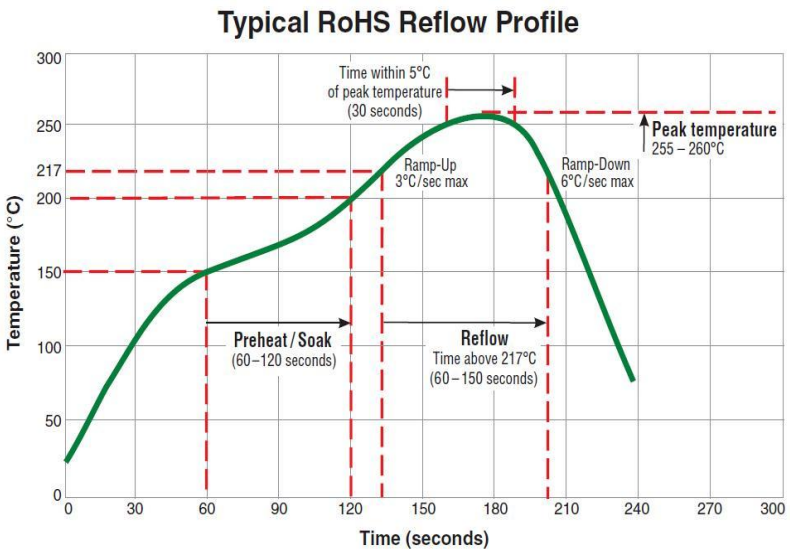
◆Our specification limits the quality of the component as a single unit. Please ensure the component is thoroughly evaluated in your application circuit.

◆ When using our high voltage inverter transformers, place keep 2mm away from the electric conductor.

Soldering:

◆ Reflow soldering

Please refer to the following recommended condition. Please do not add any stress to a product until it returns in normal temperature after reflow soldering



◆ Lead free soldering

When using products with lead free soldering, we request to use them after confirming of adhesion, temperature of resistance to soldering heat, soldering etc. sufficiently.

◆ Soldering iron

Put the soldering iron on the land-pattern.
Soldering iron's temperature - Below 350°C (FCD43 Type).
Duration - 3 seconds or less.
The soldering iron should not directly touch the inductor.

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Cleaning:

◆Refrain from cleaning coils. Ultrasonic cleaning may cause broken products. If it is a must, kindly refer to followingadvice or consult with our company.

◆When cleaning the PC board after the inductors are all mounted, select the appropriate cleaning solution according to the type of flux used and purpose of the cleaning (e.g. to remove soldering flux or other materials from the production process.)

◆Cleaning conditions should be determined after verifying through a test run, the cleaning process does not affect the inductor's characteristics.

◆The use of inappropriate solutions can cause foreign substances such as flux residue to adhere to the inductor, resulting in a degradation of the inductor's electrical properties, especially insulation resistance.

◆Inappropriate cleaning conditions（insufficient or excessive cleaning）may detrimentally affect the performance of the inductors.

* In the case of ultrasonic cleaning, too much power output can cause excessive vibration of the PC board which may lead to the cracking of the inductor or the soldered portion, or decrease the terminal electrodes' strength. Thus following conditions shall be checked.

. Ultrasonic output below 20W

.Ultrasonic frequency below 40KHz

.Ultrasonic washing period 5 minutes or less

Handling:

◆Keep the product away from all magnets and magnetic objects.

◆Breakaway PC boards (splitting along perforations)

1. When splitting the PC board after mounting product, care should be taken not to give any stresses of deflection or twisting to the board.
2. Board separation should not be done manually, but by using the appropriate devices

◆Mechanical considerations
Please do not give the product any excessive mechanical shocks and power in transportation.

◆Pick-up pressure
Damage and a characteristic can vary with an excessive shock or stress. Please don't push to add any pressure to a winding part

◆Packing- Please avoid accumulation of a packing box as much as possible.

Storage:

◆To maintain the solderability of terminal electrodes and to keep the packaging material in good condition, care must be taken to control temperature and humidity in the storage area. Humidity should especially be kept as low as possible.

◆Recommended conditions
Ambient temperature Below 40℃
Humidity Below 70% RH

◆The ambient temperature must be kept below 40℃. Even under ideal storage conditions inductor electrode solderability decreases as time passes, so inductors should be used within 6 months from the time of delivery.

◆In case of storage over 6 months, solderability shall be checked before actual usage.

◆The packaging material should be kept where no chlorine or sulfur exists in the air.

◆Under a high temperature and humidity environment, problems such as reduced solderability caused by oxidation of terminal electrodes and deterioration of taping/ packaging materials may take place.